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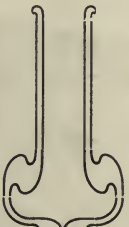
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SECONDARY EDUCATION IN CALIFORNIA



A MONOGRAPH

BY J. B. MCCHESNEY



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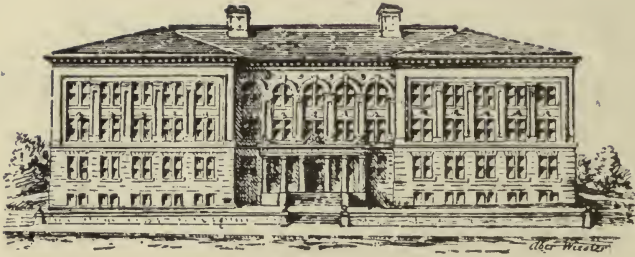
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Secondary Education in California

By J. B. MCCHESENEY





Mission High School Building, San Francisco

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Secondary Education in California

By J. B. MCCHESNEY

Secondary education received scant attention during the early history of California for two obvious reasons. First, the population was composed almost entirely of men who came to the State for the purpose of engaging in gold mining, intending as soon as their fortunes were made to return to their homes and families. They had no immediate use for schools of any kind, and they gave little thought to provisions for their organization and maintenance. Secondly, the State was sparsely populated except in the mining camps, where for several years it was difficult to carry on schools of a primary grade for more than three or four months in a year. Fortune hunting was the supreme intent of the early Californians; all other interests in which civilized society is supposed to be concerned were, for the time being, held in abeyance.

However, the makers of the first Constitution realized that an instrument of that kind would be incomplete without some provision being made for education, and consequently, we find Article IX, Section 3, reading as follows:

"The Legislature shall provide for a system of schools by which a school shall be kept up and supported in each district at least three months in each year, and any school district neglecting to keep up and support such a school may be deprived of its proportion of the interest of the public fund during such neglect."

The expression "system of schools" is somewhat indefinite. At any rate, it rested with the Legislature to determine the grades of schools which they might constitutionally provide for. In the proceedings of the Legislature of 1851, Article II, Section 5, we find the following:

"Not less than 60 per cent of the amount paid each district shall be expended in teachers' salaries; the balance may, at the discretion of the

district, be expended in building or repairing school houses, purchasing a library or apparatus or *for the support of a high school.*" Thus we see that as early as 1851 legislative provision was made for the support of a high school.

But as far as I have been able to learn, no high school was organized as a result of this permission. In fact, there were no pupils of sufficient scholastic attainments to form a class, or if there were, the "diggings" had such superior attractions that a school of any kind received little or no consideration.

The next Legislature, that of 1852, enacted a new school law, making no mention of high schools. Whether the members thought that the time was not yet ripe for such schools, or whether they considered that the entire school fund should be devoted to elementary instruction, I am unable to state.

In 1855 the school law was enacted for a third time under the following title: "Act to establish, support and regulate common schools and to repeal former Acts concerning the same." Section 17 defined the duties and powers of district trustees as follows:

"They may cause the common schools within their respective jurisdictions to be divided into Primary, Grammar and High School Departments, and to employ competent teachers for the instruction of the different departments, whenever they may deem such division advisable, *provided*, there be sufficient means for all such departments, and if not, then in the order in which they are herein named, the primary school having preference."

This Act remained undisturbed on the statute books for eight years, and during this period the first permanent high schools of California were established. The San Francisco High School was organized in January, 1858, being the first in California. It was attended by both sexes, and deservedly enjoyed a high reputation.

✓ The school records of this period are exceedingly meager, thus making it difficult to collect accurate data concerning actual work done in secondary education. Then, too, the term "high school" was vaguely used, there being no recognized authority to place a line of demarcation between advanced grammar grades and high school grades proper. Previous to the formal organization of a high school in San Francisco in January, 1858, a class of advanced grammar school pupils was maintained. The school authorities of San Francisco did not call this a high school, although it is quite probable that distinctively high school branches were taught. ✓

About this time a high school was commenced in Sacramento and another in Marysville, but in the annual report of the State Superintend-



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High School Building, Oakland

ent for 1860 but two high schools are recognized, one in San Francisco and one in Sacramento.

✓ During the decade commencing with 1860 an increased interest in secondary education was manifested in California. In November, 1862, a high school was organized in Nevada City, and at about the same time another in Grass Valley, but four miles distant. These towns were at that time the largest and most thriving mining towns in the State. They were the centers of trade for an extensive area occupied by valuable quartz mines and deep placer diggings. The inhabitants were prosperous and they were desirous that their growing families should enjoy the best educational privileges possible. At this time the influence of the mining counties predominated in State affairs, as they possessed both the wealth and a large majority of the voting population.

The great valley extending from the Tehachapi Mountains on the south to the town of Redding on the north afforded only a rich feeding ground for immense numbers of cattle and sheep. Californians had not yet learned the wonderful possibilities of this vast area for the production of grain and fruit. The State was a mining State; the new arrivals looked to the mines for investment and as a field for operation. The representatives of the so-called "cow counties" were unwilling that the more prosperous mining counties should dictate a system of common schools which would give them an undue share of the school funds. High schools could exist in thickly settled communities only, and these were not found outside the cities except in the mining counties. This accounts for the fact that until the close of this decade the high schools of California were confined to the larger cities and towns.

But the dawning of the next decade witnessed a change. The gold mines, which required little or no capital for their operation, were mostly worked out, and thus men of small means were compelled to turn their attention to other pursuits. Vast areas which early Californians considered worthless were found to be capable of sustaining unlimited grain fields and orchards, and as a result, the land was taken up, trees and vines were planted, and California soon became noted for its broad fields of grain and extensive vineyards.

Thriving villages sprang into existence all through the State; the despised "cow counties" so increased in population that they soon controlled State legislation. This meant among other matters that the common school system must be acceptable to them, and as their centers of population were only in the formative period they had no use for high schools. The primary and grammar grades satisfied all their needs. To keep these open the requisite number of months each year in order to

draw their share of the public funds imposed a burden which they were scarcely able to bear.

In a general way, it may be stated that the decade from 1870 to 1880 witnessed a gradual preponderance of population in the agricultural counties over the mining counties, and with this went a corresponding influence in State affairs. But this decade was not prolific in the organization of new high schools. One was opened in Oakland in 1869, one in Los Angeles in 1871; San Jose and Vallejo followed soon after.

On the whole, it may be stated that California did but little for the cause of secondary education during the first thirty years of her history. This can be said, however, although the high schools were limited in number, they were excellent in quality. The teachers employed in them were men and women of superior ability and devoted to their profession. Their schools took a deservedly high rank, and in their courses of study and in their methods of teaching they were befitting models for the high schools which were to follow. This is all the more remarkable because the manner in which high school certificates were issued was somewhat lax, or perhaps, to state it more accurately, the rigorous and searching methods which afterwards prevailed were not used.

It would be interesting at this point to give a careful analysis of the social and political conditions which prevailed in California during the decade above referred to because of the predominating influence these conditions had upon the cause of secondary education. A complete discussion of this most interesting problem would lead me far astray, and I must content myself by a few bald statements which I think a careful discussion would confirm.

Many of the early Californians were men of broad views. Their investments were in the mines, and from them they obtained their wealth. Gold was an expensive commodity and not suitable for making exact change; early Californians became indifferent to small coins and would not use them in their business transactions; their views of affairs generally were expanded, and it may be said that they despised the day of small things. All this had its influence upon the character of the individual, and thus upon the community as a whole.

This state of affairs might do if the mines held out and the poor as well as the rich could avail themselves of their use. But a change came; the cry was spread abroad that the mines were worked out; men must adapt themselves to new conditions, must seek new fields of labor. Many engaged in agricultural pursuits, where the labor was severe and the results doubtful. To give up the expensive habits of the miner and to adopt the frugal ways of the farmer was a difficult lesson for the Californians of this decade. But some learned it; others, however, did not.

They became restless, fault-finding and envious of those more fortunate. Labor and capital became antagonistic, and a general condition of unrest prevailed throughout the State. Agitators harangued crowds gathered on vacant lots in San Francisco; they were exhorted to down the aristocrats and demand a more equitable division of wealth. This agitation spread throughout the State, and as a result of it all a constitutional convention was called, a new constitution drafted and finally adopted by a popular vote of the people.

The new constitution was a child of the transitional period and consequently some of its sections were unwise, if not unjust. Its provisions were presented and discussed by men laboring under strong prejudices. During the decade there had been a growing depression among workingmen throughout the State. The trouble was considerably augmented by a large immigration of Chinese, who by their industrious, plodding ways and their readiness to work for small wages created a violent antagonism toward them among white laborers. A new political party was organized called the Workingmen's Party, with a platform which appealed to class prejudice and which was particularly opposed to Chinese laborers and those who employed them. It may readily be understood that a constitutional convention, called at a time of unusual industrial depression, would reflect in its discussions and conclusions the general trend of public thought. Then, as ever before, it was thought that constitutional provisions and legislative enactments would remedy conditions which could only be reached by changing the thought and purpose of the people.

✓ Previous to the meeting of the Constitutional Convention, in October, 1878, secondary education had received little encouragement from the people of California. The legislative enactment of 1855 provided for primary, grammar and high school departments, but the primary and grammar schools must receive the first consideration; then, if funds remained in the treasury, they might be appropriated to the support of a high school. But, as we have already shown, this provision, although remaining substantially unchanged until 1872, did not actively encourage the cause of secondary education. On the contrary, the system of issuing teachers' certificates at this time rendered it next to impossible to obtain a high school certificate except from City Boards of Education; these might be recognized by County Boards of Examination or not, as they saw fit. ✓

When all these conditions are fully realized, one can readily understand that the friends and active promoters of secondary education looked forward to the action of the Constitutional Convention with intense interest, and also with considerable anxiety. They had not met with

disappointments and rebuffs time and again without a pretty intimate knowledge of the general trend of public sentiment toward the cause they held so dear, and so, while they hoped, they also feared. They had experienced apathy, indifference and open hostility, but all this would be forgotten if the new constitution would recognize the high school and make it an integral part of the State system of schools.

Space forbids my entering upon a detailed account of the labors of this convention or of the discussions which took place concerning an educational system for California.

The subject received careful attention by men of large experience in statecraft—men who had an unbounded faith in the future greatness of California and were animated by a desire to formulate the best constitution possible.

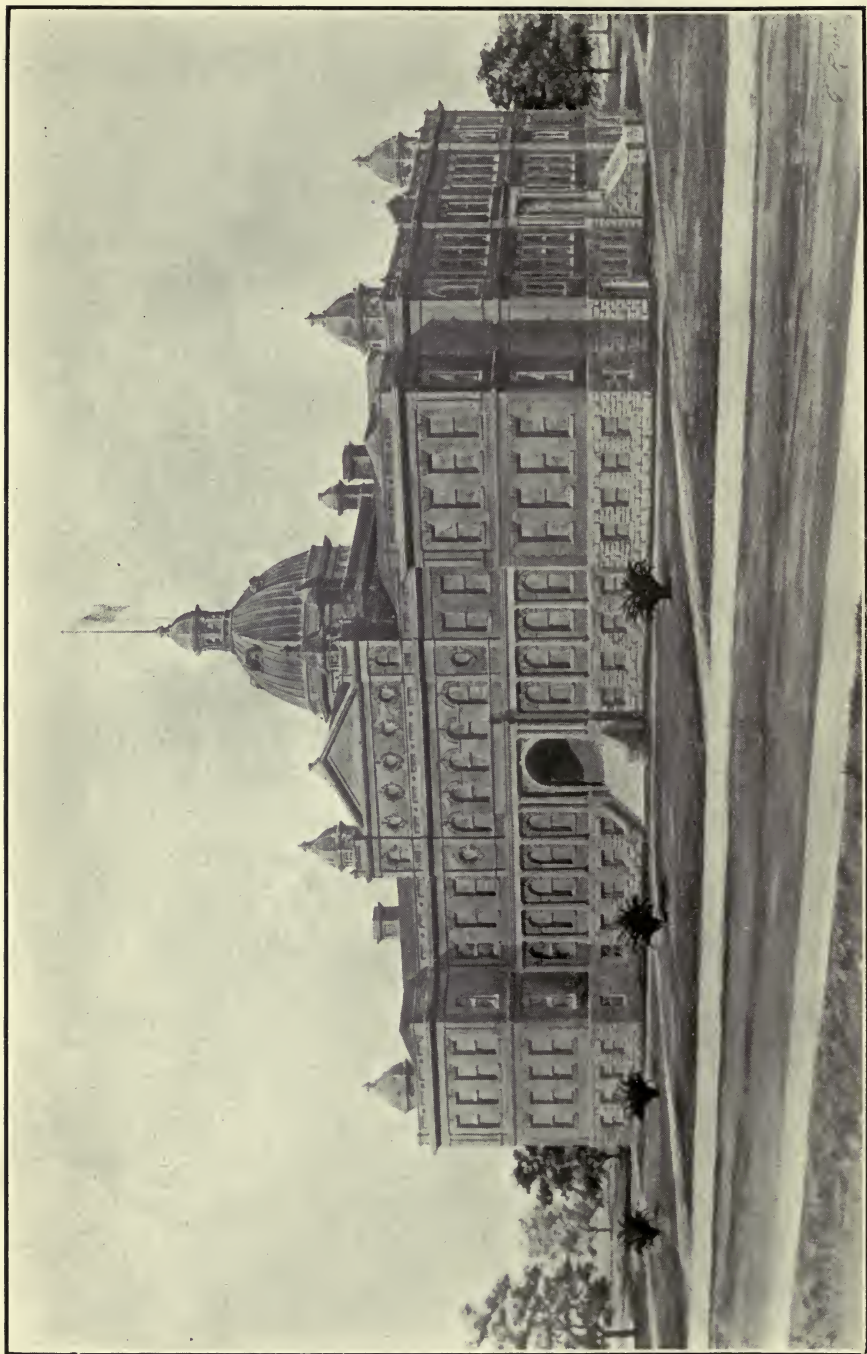
The final result of these discussions providing for high schools was embodied in Article IX, Section 6, which reads as follows:

“The public school system shall include primary and grammar schools and such high schools, evening schools, normal schools and technical schools as may be established by the Legislature or by municipal or district authority; but the entire revenue derived from the State school fund and the State school tax shall be applied exclusively to the support of primary and grammar grades.”

It will thus be seen that by the adoption of the new constitution by the people of the State, high schools could not become a part of the State system of schools. It is true, the Legislature might establish them, but no one believed that any Legislature would pass an act so opposed to our democratic principles as to require a community to support a high school contrary to the wishes of its people. It would be putting the case very mildly to say that the friends of secondary education were terribly disappointed. They believed that the public sentiment of the State was prepared to make high schools an integral part of the school system, and to bestow upon them a generous portion of the school funds of the State. But the die was cast; high schools must get on in the future, as in the past, by the sole support of municipal or local taxation.

As one reviews the history of education in California for the quarter of a century that has elapsed since the adoption of the new constitution he is inclined to take a more moderate view than high school men entertained at that time. That Section 6 of Article IX expressed the honest and mature convictions of a majority of the framers of the constitution no one has ever denied. Whether they were mistaken or not remained for coming years of experience to determine. When the new Constitution became operative nearly, if not quite, all the cities and larger towns had organized high schools and were supporting them by local taxation,





High School Building, Stockton

and they continued to do so after they learned that the State funds could not be used to assist them. Sometimes a cause is benefited by simply securing the attention of the public. If it can only get itself squarely before the public eye, can get the people to thinking about it and talking about it, then, if the cause possess merit, the public will not only discern it, but espouse it by voice and action. The high schools of the State occupied a position somewhat similar to this during the first years of the new Constitution. The attention of the public was early directed to the situation and each community found that if it was to enjoy the advantages of a high school it must support it. This led to an investigation of the benefits which the community would gain, to making inquiries of those who already enjoyed the privileges of a high school, and in a general way to obtaining an intelligent view of the situation. As a result of it all the cause of secondary education did not suffer. No high school was discontinued; on the contrary, new ones were organized in many of the growing districts of the State. And more than all this, as public attention was directed toward them, the grade of the high schools was raised, an element of competition between different communities was introduced and improved methods of teaching were employed. ✓ The high school took a prominent place on the programs of the county institutes and at the meetings of the State Association of Teachers special sections were devoted to secondary schools, in which discussions were held on all matters pertaining to their condition and needs. University professors and prominent educators from other States took a prominent part in these meetings and imparted a new interest in the cause of high schools. Hence taking a broad and temperate view of the entire high school situation, of their growth, of their improved condition and of the increased interest manifested toward them by the public, the conclusion is evident that the blow struck at the interests of secondary education by the Constitutional Convention of 1878 and 1879 was not as serious as it was feared it would be, and that, on the contrary, it had its redeeming features. ✓

After the new condition had been in operation a few years a new feature of advanced instruction in the schools of the State made its appearance. There were many districts and communities throughout the State which were unable to bear the financial burden which a fully equipped high school would impose. The residents of these districts saw the advantages which were derived from the establishment of high schools, and very naturally they desired to participate in them. They conceived and carried into execution a plan whereby they might secure partial if not the entire advantages which they would gain from the organization and support of a high school in their midst. This was

the adoption of a course of study supplementary to the well established grammar grades and was called the "grammar school course." The branches taught included a sufficient amount of mathematics, science, history and English language to enable the pupils taking it to enter one of the scientific colleges or the agricultural college of the University of California. This was claimed by its promoters to be not a high school, but simply an extension of the grammar grade, and consequently, could receive its quota of the State school fund. Thus districts in which the grammar school course was taught were enabled to enjoy partial advantages which a fully equipped high school would confer without the necessary local taxation. By an act of the State Legislature in March, 1887, the State Controller was authorized and directed to appropriate three dollars from the State school fund for each pupil enrolled in the grammar school course in the several districts of the State. This phase of the general question of State support of high schools did not remain in operation for any length of time. The question as to whether the State school fund or any portion thereof could be legally used to support the so-called grammar school course was frequently discussed by the public press and in teachers' conventions. The general consensus of opinion finally was that the payment of any portion of the State school fund for its support was a violation of the State Constitution, and the legislative act recognizing it was repealed in 1891.

This brief episode in the history of secondary education in California school training beyond what the ordinary grammar school offered, and emphasized the fact that the people were conscious of the value of a it paved the way for an amendment to the Constitution.

The difficulties under which sparsely populated communities labored in not being able to support a high school was quite satisfactorily overcome by an act of the Legislature passed in 1891, whereby contiguous school districts could unite their efforts and establish a union high school. As a preliminary to the organization of such a school a special election must be held in the districts which proposed to join in the support of a high school, and if it was shown by the result of said election that the qualified voters of the districts interested desired the school and were willing to be taxed for its support, then it became the duty of the Board of Supervisors of the county in which the districts were located to levy a tax upon the property thereof in sufficient amount to defray the expenses necessary for the support of the school. As a result of this law quite a number of union high schools have been organized and are in successful operation. Their effect upon the general educational sentiment of the State cannot be overestimated. Their influence in favor of an education beyond the simple rudiments is exerted in the rural districts, where

it is particularly needed; besides it adds an attraction to the country which heretofore was enjoyed exclusively by the cities and larger towns. The union high school is destined to exert a far-reaching and favorable influence upon the cause of secondary education in California.

Another fact must not be overlooked in this connection. The introduction of the union high school system in California brought, in a vital way, the question of State support of high schools to a large number of people who heretofore had given it but little attention. They were led to see the incongruity of a State system of schools which fostered the two extremes, but left them without a connecting link. It provided for the support of schools which prepared for admission to the high school and then stopped, refusing to render assistance in making preparation for admission to the State University, an institution which it liberally supported. The union high school has passed the experimental age; its adequacy to meet the wants of rural districts desiring to secure the benefits which a high school would confer has been practically demonstrated by a successful experience of twelve years.

✓ In the early history of California the term high school was vague and indefinite. Having no precise signification, it was frequently used when the course of study failed to warrant it. Thus it very naturally came to pass that several schools in which, in addition to the ordinary grammar school studies, algebra and ancient history were added, were called by their patrons high schools. Neither custom nor decisions by competent school authorities had fixed a limit for a grammar school except in a very general way. It is true that in several legislative enactments it is stated that instruction must be given in the common English branches, but prolonged discussions in the Constitutional Convention of 1878-79 demonstrated conclusively that its members differed very radically in their understanding of the term "grammar school."

The school law was repeatedly re-enacted during the life of the first Constitution and the original definition of a grammar school was substantially modified. Subsequent legislative action providing for a State Board of Education, and in defining its duties and powers, authorized it to grade the schools of the State and to adopt a uniform series of text books for the use of the different grades. Section 17 of an Act passed by the Legislature in 1855 authorized district trustees to divide the schools in their respective jurisdictions into primary, grammar and high school departments. In 1863 County Boards of Education were established, with authority to issue certificates of the first, second and third grades, which would entitle the holders thereof to teach in schools of the grammar, intermediate or unclassified and primary grades, respectively. The Legislature of 1865 provided that "all schools, unless

provided for by special law, shall be divided into three grades, viz.: First, second and third." (Cities having a Board of Education governed by special laws could grant certificates for teaching high schools.) In an act passed by the Legislature of 1869-70 the provisions of the preceding act were substantially continued in force, and from this time on to the meeting of the Constitutional Convention of 1878-79 the classification of the schools was directed by the State Board of Education. ✓

✓ During the entire life of the old Constitution no adequate provision was made for the issuance of high school certificates. The entire number of high school teachers needed in the State was so limited that methods for their certification occupied but little attention by boards of education or State Legislatures. It was the custom in some of the larger cities at first to select high school teachers from those in the grammar schools who had been successful and efficient. Then followed a period during which the State Board of Education issued educational diplomas and life diplomas to teachers for service in high schools. City Boards of Education were also authorized to issue high school certificates upon a satisfactory examination. But the methods used for certifying high school teachers were more or less desultory and lacking in uniformity until 1895, when a committee from the State Teachers' Association recommended that no one should receive a high school certificate who had not had an equivalent of a college education, and this recommendation prevails at the present time. ✓

✓ A movement was inaugurated by the University of California in 1884, which was destined to fix definitely and authoritatively the curricula for high schools. This was the adoption by the faculties of the university of a plan by which those pupils who had maintained an excellent standard during their high school course might be admitted to the State University without examination. This is known in California as the "accrediting system," and as it has been an exceedingly important factor in the history of secondary education in this State, it may be well to give, in brief, its main provisions. *

First, no high school could be placed on the accredited list against its consent; as a prerequisite it must request the favor. This condition having been complied with the university faculties deputized some members of its body to visit the school and determine by a careful and thorough examination whether its course of study and its methods of instruction entitled it to be placed on the accredited list. The examiners embraced representatives of the departments of ancient languages, mathematics, history and science, or as many of these departments as the school desired to be accredited in, for one feature of the system is, that it admits of partial accrediting. The time at which these examiners





Girls' High School Building, San Francisco

made their visit might or might not be known by the teachers of the school; practically, it made no difference, as no amount of cramming would sufficiently prepare the pupils for the examination. The examiners then made a report of their findings to the faculties of the university, who decided whether the school should be placed on the accredited list. If the decision was favorable the principal of the school was notified of the fact and for the next scholastic year those pupils of his, who had completed its prescribed course of study and had received a diploma certifying to that fact, were entitled to admission to the State University on his recommendation; without this personal recommendation the pupil must undergo an examination, whatever his standing in the high school might have been. This feature of the accrediting system has been criticised because of the power it places in the hands of the high school principal, but an experience of nearly twenty years has failed to produce a single instance, as far as my knowledge extends, wherein this power has been abused. It is customary for the principal to act on the recommendation of the heads of the different departments of his school, as they are most familiar with the attainments of the pupils.

In 1885 but three schools in the State requested an examination for accrediting, but the number gradually increased year by year, but not as rapidly as might have been expected. One reason for this probably arose from the fact that the aims and work of the university were not generally understood by the people of California. But another movement by the university authorities in the early nineties served to remove largely this impediment and to bring their work directly before the people. This was the inauguration of a system of university extension lectures in the larger cities of the State. Lecture courses were given free, or, in some cases, for a small consideration. (See Appendix A.) These lecture courses were well attended by the more progressive people and they served to create a desire for a broader culture.

As one reflects upon the general attitude of the people of California toward secondary and higher education previous to the adoption of the accrediting system and a systematized course of university extension lectures and of the change which they wrought, he is not only highly gratified, but is amazed at the result. Apathy yielded to a lively interest; local pride was stimulated and a general inquiry was aroused as to the best means for securing an entrance to the university. As the secondary school was the only door through which one could pass to reach the university, it will readily be perceived that an awakened interest in the higher education had a stimulating effect upon the prosperity of the high school. This new interest dates from 1885, although for a few years a change was scarcely perceptible. The seed was sown

by the adoption of the accrediting system and the inauguration of courses of university extension lectures a few years later, rendered it fruitful. Beneficial results were seen not only in the increased number and efficiency of public high schools, but of a general awakening and improvement of private secondary schools and seminaries. They found it necessary to fall into line in order to hold their pupils, and as they did so they enjoyed a generous share of the prosperity which befell the public high schools.

At a meeting of the National Educational Association held in 1892 a resolution was adopted which directed particular attention to secondary education throughout the whole country, and California shared equally with her sister States in this new awakening. This resolution was particularly directed toward an investigation of the requirements for college entrance and toward the possibilities of making them more uniform. As a result of this resolution ten of the most prominent educators in the United States were appointed a committee to make a careful study of the question and report at a future meeting of the Association.

This committee entered upon the work with commendable zeal; sub-committees were appointed to investigate and report to the general committee on particular subjects; in fact, the entire scheme of education previous to entrance to college was reviewed and reported upon. The friends of elementary education became deeply interested in the labors of the committees because they saw that their conclusions might have an important bearing upon the scope of their work.

So deeply interested did the friends of education throughout the whole country become that at a subsequent meeting of the National Educational Association another committee, known as the committee of fifteen, was appointed to continue the investigation already commenced. This committee enlisted in its labors a large number of educational experts whose duty it was to make a careful and detailed study of those subjects which pertained to their special lines of work. The different reports were submitted and discussed and finally published in convenient form for general distribution. Both State associations of teachers and county institutes made these reports a basis for their deliberations, and thus the entire educational field was exploited, with the important result that the scope of the high school was fixed and a general understanding reached as to what the term secondary education really implied. This alone would have been a sufficient recompense for the labors of the committees, but practically it was a small portion only of the good which followed. A new interest was taken in schools, particularly in the subjects to be taught and the manner of their presentation. All this coming as it did, just when California was rejoicing in an

educational renaissance, gave a new impetus to the movement inaugurated by the accredited system and the university extension lectures.

Reference should be made to a clause in the new Constitution which guaranteed the admission of women to all the collegiate departments of the State University. Advantage was not taken of this provision immediately, but when the full meaning of what it implied and the means for preparation were multiplied, it was eagerly accepted as both a wise and just recognition of the claims of women to a share in the benefits which a State institution afforded. This, it will be readily seen, gave an additional impulse to the cause of secondary education and rendered the multiplication of high schools necessary. The reaction of this movement upon the high schools themselves was particularly beneficial, in that young women, by the assistance of a thorough pedagogical department in the university, became equipped to render valuable service in the high schools.

The following table shows the increase in public high schools from 1885 to 1903:

Year.	No. of Schools.	No. Accredited.		Total.
		Public.	Private.	
1885	12	3	..	3
1890	24	11	2	13
1895	98	43	14	57
1900	105	87	23	110
1902	139	93	22	115
1903	143	99	19	118

In 1902 the number of high school teachers was six hundred and six and the total high school enrollment was fourteen thousand four hundred and fifty-nine pupils. To instruct this number \$1,007,646.30 had to be raised by the several communities in which the high schools were located. In addition to this remarkable increase in the number of public high schools, private secondary schools and seminaries enjoyed a corresponding share of the general prosperity. The number of those accredited rose from one in 1888 to twenty-two in 1902. But these figures only partially represent the remarkable impetus given to the cause of secondary education during this golden period. There were large numbers of students proper, some young, some in middle life and others still who had passed the fifty-mile stone, who were enrolled as members of the University Extension Lecture Courses, and by a regular attendance, supplemented by home study, obtained a fair insight into their respective subjects.

During all this period of prosperity there still lingered a feeling among the friends of secondary education that the high school did not occupy that position in the State systems of schools which its importance

demand. It was not forgotten that State funds were used to support elementary schools and the university, but the connecting link, the high school, was left to be provided for by local taxation, which was, to say the least, an uncertain quantity. If there was a loud cry for retrenchment the high school fund was usually the one to be reduced to the lowest possible limit. It could not be expected, under these circumstances, that a persistent effort would not be made to place the high school where it could be a recipient of State bounty. After much discussion by the school people of the State the Legislature of 1901 passed a resolution by which a proposed amendment to the Constitution might be submitted to the electors of the State for approval or rejection. This proposed amendment consisted of an addition to Article IX, Section 6, and read as follows:

"But the Legislature may authorize and cause to be levied a special State school tax for the support of high schools and technical schools, or either of such schools, included in the public school system, and all revenue derived from such special tax shall be applied exclusively to the support of the schools for which such special tax shall be levied."

This amendment was approved by a vote of the people and thus became a part of the Constitution. The long sought for condition thus became a possibility, and it only needed the proper legislative action to make it a reality. The Legislature of 1903 amended the school law by the passage of an act providing for State support of high schools, whose salient features are, that until 1906 an ad valorem tax of one and one-half per cent of the taxable property of the State shall be levied for the support of regularly established high schools, and after 1906 the State Controller shall estimate the amount necessary to support the high schools of the State and shall allow \$15.00 per pupil in average daily attendance; one-third to go to high schools, irrespective of the number of pupils and two-thirds appropriated on average daily attendance.

Sufficient time has not elapsed since this legislative act became operative to determine whether the plan therein fixed upon is the best that could be devised. It has received considerable adverse criticism by devoted friends of secondary education. All rejoice in the fact, however, that the high school is a recognized part of the State system of schools, and can constitutionally receive State funds for its support.

The intimate relations which necessarily existed between the State University and the high schools in consequence of the influences already recounted, had the effect of definitely fixing the status of the high school in California. Primary education closes with a fair knowledge of arithmetic, English grammar and the use of the English language, history of the United States and the elementary principles of physiology and



High School Building, Los Angeles

hygiene, vocal music and drawing. The high school takes up a new line of studies, each of which is limited by university entrance requirements. According to a recent university register, subjects are specified in which accrediting may be given. * * *

The smaller high schools are not able to take up so varied and extensive a range of subjects as this, but in order to rank as high schools they must, at least, prepare their pupils in all the subjects necessary for entrance to one of the colleges. The larger high schools, by virtue of their number, both of pupils and teachers, are enabled to offer for accrediting the entire list of subjects submitted by the university, by a system of electives, which would be impracticable in a small school.

It will be readily gathered from the above that the State University exercises a predominating influence over the high schools, both in their courses of study and largely in the method in which the several subjects are presented. It is quite natural that this condition should cause a certain amount of adverse criticism. We are told that the high schools should stand by themselves; should be free to choose that course of study and the time to be devoted to each subject which the patrons of each school preferred; that the industrial conditions of the State are so varied that high school uniformity must work against the best interests of many localities; that the pupils of high schools located in fruit growing districts should be taught how to plant and care for trees, and how to destroy fruit pests; in short, the school should be made practical. Other critics affirm that preparation for college or university is not the best preparation for the duties of life; that there should be a differentiation of subjects into practical and culture studies. Discussions on these and kindred topics have occupied the public press and have been fruitful sources for papers read at teachers' conventions. Several of the most prominent writers for our educational journals have presented arguments both pro and con, so that high school men in California are quite familiar with what has been said upon this important subject.

But in spite of all that has been said and written, the work of centralization moves steadily on. The university decides what the work of the high school shall be and through the high school exerts an influence upon primary education. To enter upon a discussion as to whether this is the wisest arrangement or not is not pertinent to the purpose of this paper. I simply refer to this question as having had its influence upon the development of secondary education in this State, and also as being an unsettled question.

The development of secondary education in California was substantially along the same lines as those pursued in the older States. The courses of study and the methods of teaching did not differ materially

from those adopted by the high schools of Massachusetts or Michigan, still it may be interesting to note particularly the changes which occurred in the presentation of some of the subjects. In the earlier days the courses of study embraced mathematics (algebra and geometry), the ancient and modern languages, science and English literature.

Probably the fewest changes in methods of presentation by the teacher have been made in the languages, both ancient and modern. There has been a decided improvement in text books, but nothing can take the place of that accurate memorizing so absolutely necessary in gaining the rudiments of a foreign language. The teacher of mathematics, however, has materially improved upon the methods pursued by his predecessors. The principal advantage to be gained by the prosecution of this study is the unfolding of the reasoning faculties, and if it is made largely a memoriter exercise, as it was in the olden time, the greatest good is not realized. This remark applies particularly to the study of theorems in geometry. Teachers of mathematics in California high schools, at the present time, give particular attention to original demonstrations. A single step in reasoning at first gives strength and encouragement for others which follow, so that in time the pupil becomes able to give a complete original demonstration for a geometrical theorem. By this training, as he meets with the difficult problems which arise in his life work he is enabled to fortify his judgments by realizing that they were reached by rational processes.

In none of the high school studies have greater changes taken place in methods than in the entire range of the natural sciences. Up to the present time there have been three stages of development. At first the science was learned exclusively from a book. It is true there were some illustrations of experiments to aid the comprehension of the pupil, but the experiments themselves were few and far between. Whatever knowledge the pupil obtained was at the expense of the power of the imagination, hence this may be called the imagination-developing period. This, however, gave way in time to a decided improvement in science teaching, for the pupil, instead of studying illustrations, was required to observe carefully what the teacher did when he mixed the chemicals and manipulated the air-pump and the electrical machine. This was the observation period. From seeing the teacher perform the experiments to the next step, in which the pupils themselves made the experiments and took down in their note books whatever changes they observed, was a natural transition, and it brings us to the experiment-making period. This change involved a complete revolution in the equipment for science teaching in the high schools, for there must be a complete laboratory sufficiently extensive to accommodate all the pupils of the school. The

chemical laboratory must be provided with reagents, tables, sinks, running water, gas and numberless other conveniences which would be required for performing the experiments in a course in chemistry sufficiently comprehensive for entrance to the university. Another laboratory equally elaborate, but entirely different in the apparatus used, must be provided for students in physics and still another with its microscopes for classes in biology. The adoption of the laboratory methods in California for teaching the natural sciences was largely due to the influence of the university. The change involved a large expense, but the advantages it possesses over the old methods are so apparent that fairly well equipped laboratories are found in nearly all the high schools of the State.

The fourth subject embraced in the high school curriculum was formerly denominated English literature, but in university and high school schedules of the present day it is known by the comprehensive term of English. It is within the memory of many who may read this paper that during their preparatory course for college they studied English literature, at least that was the name given to the subject, but in reality they gave little or no attention to literature *per se*, but to the biographies of authors, together with the titles of their works. In 1876 the Oakland High School inaugurated a change whereby the productions of standard authors should be studied rather than their biographies. "The Lady of the Lake" and the "Merchant of Venice" were objects of discussion instead of the lives of Sir Walter Scott and Shakespeare. To the best of my knowledge this was the beginning of a movement which in a few years produced a complete revolution in the study of English literature, not only in California, but throughout the whole country. Henceforth the study was scheduled as English by high schools and universities.

About this time a new professor came to the University of California as head of the department of English Literature, who by his labors with his own classes and by calling together principals and teachers of high schools for discussion, the new movement was not only approved, but in a brief time it was adopted by most of the high schools of the State. At the present time English occupies a prominent position in the course of study of all secondary schools. This change is also largely responsible for the elimination of formal rhetoric from secondary schools. Attempting to understand the principles of the style of a given literary production without a comprehensive view of several authors' works is on a par with gaining a knowledge of the currents of the ocean by studying a bucket of water.

In view of the changes effected in the methods of teaching in the

secondary schools of the State during the last quarter of a century and in the additional fact that the schools are taught by a body of teachers unsurpassed for intelligence and for devotion to their profession, California is ready to have her secondary schools compared with those of any State in the Union. The discouragements and adversities of early years did not dishearten the friends of secondary education in the cause to which they were so thoroughly devoted, but, rather, they were fired with a renewed zeal, confident that in time their efforts would be rewarded. They fully realize also that constant change is both a condition and evidence of life; that without change there must come stagnation and death. They also recognize the fact that the solution of past problems only reveals new ones for the future. Perfection is still a dream unfulfilled.

In the general strife to make each of the divisions of the State system of schools complete there is danger in giving too much attention to the perfection of the grade and too little to the interests of those for whom the grades are organized. As at present constituted the elementary schools require eight years, four years for the primary and four years for the grammar department, the high schools four years, the university four years and the professional school four years. so that, if a pupil enters the primary school at the age of six, the legal school age in California, and continues in regular course through the succeeding departments, he will have reached the age of twenty-six years before he is ready to commence his professional work. This time may be reduced one year for those who expect to engage in medical practice by taking a prescribed course in the university. All will agree that there must be something radically wrong in a system which requires so many of the best years of one's life to get ready. This problem is too important to be thrust aside; it touches life on too many sides; besides the educational phase, there is the commercial, and, more than all others combined, the social aspect; for any influence that has a tendency to loosen the bonds which hold society together in organized families should receive the strongest disapprobation. There must be an earlier differentiation of studies, the work of the student must be more intensive, he must sooner decide his life work and expend his efforts directly toward that goal. It may be said that such a course will make him narrow minded, but this objection will have little weight at the present day, when one's general reading covers broad grounds. President Harper says: "The high school is no longer a school preparatory for college. In its most fully developed form it covers at least one-half the ground of the college fifty years ago. It is a real college; at all events, it provides the earlier part of a college course." But will the college grant diplomas in two years

to those students who have taken a full four-year course in the high school? Or will the high school reduce its requirements so that one or two years may be saved? These are vital questions for both colleges and high schools. The character of the future high school as well as the scope of secondary education are problems requiring a wider experience for their solution than we now possess.

APPENDIX A.

Extension Courses.

1891-92.

With a view to the extension of the advantages of the University to teachers and other persons whose engagements will not permit them to go to Berkeley, courses of instruction will be offered during the year 1891-92 in San Francisco. It may be expected that other Courses will be added in subsequent years.

Persons who offer to do systematic work in the Extension Courses, and to take examinations in them will be enrolled as Attendants upon Extension Courses. Attendants who pass satisfactory examinations will be entitled to receive, from the University, Certificates of Record of the work done, which may be accredited to them, upon their scholarship records, if they subsequently become students of the University.

Visitors may be admitted to Extension Courses at the discretion of the professors in charge.

Persons desiring to enroll themselves for these Courses are requested to communicate either with the professors in charge, or with the Recorder.

During 1891-92, Extension Courses will be offered in San Francisco as follows :

PHILOSOPHY

The Essential Problems of Philosophy and the Course of its History from Descartes through Kant. A Course of about twenty lectures. Once or twice a week, at times to be determined. Professor HOWISON.

HISTORY AND POLITICAL SCIENCE

The Transition from the Renaissance to the Reformation. A Course of lectures once a week during the first term. First Unitarian Church, corner Franklin and Geary Streets, Monday evenings, at eight o'clock. Associate Professor BACON.

Another Course on some suitable topic in history or political science may be given during the second term by some other member of the Department.

ENGLISH

A. Shakepeare's Tragedies : Julius Cæsar, Richard III., Hamlet, Othello, Macbeth, King Lear, and Coriolanus. Fifteen lectures, accompanied by class essays and discussions, during the first term. Academy of Sciences, Friday afternoons, 3:45-5:45.

Open to all adults qualified to perform the work of the Course. Visitors are admitted. Professor GAYLEY.

B. History of the English Language. Two hours a week during the second term. Assistant Professor LANGE.

Or Historical and Comparative English Grammar. One hour a week of lecture, followed by one hour of conference and discussion, during the second term. Associate Professor BRADLEY.

MATHEMATICS

Propædæutic to the Higher Analysis. A knowledge of elementary geometry, trigonometry, and analytic geometry is prerequisite for the Course. Girls' High School building, Golden Gate Avenue, Saturday mornings, at 10:30. The Course will continue through most of the school year. Professor STRINGHAM.

APPENDIX B.

State High School Fund.

County.	Name of School.	Ave'ge Daily Attendance.	Apportionment on $\frac{1}{3}$ Basis.	Apportionment on Attendance.	Total Apportionment.
ALAMEDA	Alameda	325	\$382 50	\$2,564 25	\$2,946 75
	Berkeley.	508	382 50	4,008 12	4,390 62
	Oakland	836	382 50	6,596 04	6,978 54
	Oakland Polytechnic ..	263	382 50	2,075 07	2,457 57
	Union No. 1	44	382 50	347 16	729 65
	Union No. 2	56	382 50	441 84	824 34
	Union No. 3	64	382 50	504 96	887 46
	Total				\$19,214 94
BUTTE	Chico	46	382 50	362 94	745 44
	Gridley	14	382 50	110 46	402 96
	Oroville	48	382 50	378 72	771 22
	Total				\$1,999 62
COLUSA	Colusa	47	382 50	370 83	753 33
	Pierce Joint Union ...	36	382 50	284 04	666 54
	Total				\$1,419 87
CONTRA COSTA ..	Alhambra Union	29	382 50	228 81	611 31
	Mount Diablo Union..	45	382 50	355 05	737 55
	John Swett Union.....	29	382 50	228 81	611 31
	Liberty Union.....	22	382 50	173 58	556 08
	Total				\$2,516 25
DEL NORTE	Del Norte County	21	382 50	165 69	548 19
	Total				\$548 19
FRESNO	Alta Joint.	18	382 50	142 02	524 52
	Clovis Union.....	26	382 50	205 14	587 64
	Fowler Union	37	382 50	291 93	674 43
	Fresno.	266	382 50	2,098 74	2,481 24
	Sanger Union	42	382 50	331 38	713 88
	Selma Union	89	382 50	702 21	1,084 71
	Washington Union ...	53	382 50	418 17	800 67
	Total				\$6,867 09

County.	Name of School.	Ave'ge Daily Attendance.	Apportionment on $\frac{1}{4}$ Basis.	Apportionment on Attendance.	Total Apportionment.
GLENN	Glenn County.....	29	\$382 50	\$228 81	\$611 31
	Orland Joint Union...	17	382 50	134 13	516 63
	Total.....				\$1,127 94
HUMBOLDT	Arcata Union	30	382 50	236 70	619 20
	Eureka	90	382 50	710 10	1,092 60
	Total.....				\$1,711 80
INYO	Bishop	23	382 50	181 47	563 97
	Total.....				\$563 97
KERN	Kern County.....	148	382 50	1,167 72	1,550 22
	Total.....				\$1,550 22
KINGS	Hanford Union.....	114	382 50	899 46	1,281 96
	Lemoore.....	20	382 50	157 80	540 30
	Total.....				\$1,822 26
LAKE.....	Clear Lake Union	47	382 50	370 83	753 33
	Total				\$753 33
LOS ANGELES...	Alhambra.....	29	382 50	228 81	611 31
	Citrus Union.....	34	382 50	268 26	650 76
	Compton Union	56	382 50	441 84	824 34
	Covina	32	382 50	252 48	634 98
	El Monte Union.....	20	382 50	157 80	540 30
	Glendale Union	34	382 60	268 26	650 76
	Long Beach	59	382 50	465 51	848 01
	Los Angeles.....	560	382 50	4,418 40	4,800 90
	Los Angeles (Commercial)	105	382 50	828 45	1,210 95
	Los Nietos Valley Union	50	382 50	394 50	777 00
	Monrovia	29	382 50	228 81	611 31
	Pasadena City.....	288	382 50	2,272 32	2,654 82
	Pomona City.....	110	382 50	867 90	1,250 40
	San Fernando Union..	25	382 50	197 25	579 75
	Santa Monica City....	34	382 50	268 26	650 76
	Whittier.....	44	382 50	347 16	729 66
	Total.....				\$18,026 01
MADERA	Madera	39	382 50	307 71	690 21
	Total.....				\$690 21

County.	Name of School.	Ave'ge Daily Attendance.	Apportionment on $\frac{1}{3}$ Basis.	Apportionment on Attendance.	Total Apportionment.
MARIN	San Rafael	70	\$382 50	\$552 30	\$934 80
	Total				\$934 80
MENDOCINO	Fort Bragg Union	27	382 50	213 03	559 53
	Mendocino	44	382 50	347 16	729 66
	Ukiah	80	382 50	631 20	1,013 70
	Total				\$2,338 89
MERCED	Merced	86	382 50	678 54	1,061 04
	West Side Union	25	382 50	197 25	579 75
	Total				\$1,640 79
MONTEREY	Pacific Grove	47	382 50	370 83	753 33
	Salinas	106	382 50	836 34	1,218 84
	Total				\$1,972 17
NAPA	Napa	75	382 50	591 75	974 25
	St. Helena Union	35	382 50	276 15	658 65
	Total				\$1,632 90
NEVADA	Grass Valley	63	382 50	497 07	879 57
	Meadow Lake Union	31	382 50	244 59	627 09
	Nevada City	71	382 50	560 19	942 69
	Total				\$2,449 35
ORANGE	Anaheim	62	382 50	489 18	871 68
	Fullerton Union	61	382 50	481 29	863 79
	Santa Ana City	275	382 50	2,169 75	2,552 25
	Total				\$4,287 72
PLACER	Placer County	68	382 50	536 52	919 02
	Total				\$919 02
RIVERSIDE	Banning	27	382 50	213 03	595 53
	Corona	34	382 50	268 26	650 76
	Elsinore	13	382 50	102 57	485 07
	Hemet Union	26	382 50	205 14	587 64
	Perris Union	14	382 50	110 46	492 96
	Riverside	252	382 50	1,988 28	2,370 78
	San Jacinto	20	382 50	157 80	540 30
	Total				\$5,723 04

County.	Name of School.	Average Daily Attendance.	Apportionment on $\frac{1}{3}$ Basis.	Apportionment on Attendance.	Total Apportionment.
SACRAMENTO ...	Elk Grove	22	\$382 50	\$173 58	\$556 08
	Sacramento	303	382 50	2,390 67	2,773 17
	Total				\$3,329 25
SAN BENITO	Hollister	41	382 50	323 49	705 99
	Total				\$705 99
SAN BERNARDINO	Chino	10	282 50	78 90	462 40
	Colton	36	382 50	284 04	666 54
	Needles (first year) ...	9	382 50	71 01	453 51
	Ontario	88	352 50	694 32	1,076 82
	Redlands	220	382 50	1,735 80	2,118 38
	San Bernardino	172	382 50	1,357 08	1,739 58
	Total				\$6,516 15
SAN DIEGO	Cuyamaca	14	382 50	110 46	402 96
	El Cajon Valley	20	382 50	157 80	540 30
	Escondido	74	382 50	583 86	966 36
	Fallbrook	27	382 50	213 03	595 53
	National City	26	382 50	205 14	587 64
	Ramona	13	382 50	94 68	477 18
	San Diego	300	382 50	2,367 00	2,749 50
	Total				\$6,409 47
SAN FRANCISCO.	Girls	527	382 50	4,158 03	4,540 53
	Humboldt	509	382 50	4,016 01	4,398 51
	Lowell	604	382 50	4,765 56	5,148 06
	Mission	279	382 50	2,201 31	2,583 81
	Polytechnic	239	382 50	1,885 71	2,268 21
	Total				\$18,939 12
SAN JOAQUIN...	Lodi	60	382 50	473 40	855 90
	Stockton	253	382 50	1,996 17	2,378 67
	Total				\$3,234 57
SAN LUIS OBISPO	Arroyo Grande	20	382 50	157 80	540 30
	Paso Robles	54	382 50	426 06	808 56
	San Luis Obispo	54	382 50	426 06	808 56
	Total				\$2,157 42
SAN MATEO	San Mateo Union	24	382 50	189 36	571 86
	Sequoia Union	87	382 50	686 43	1,068 93
	Total				\$1,640 79

County.	Name of School	Ave'ge Daily Attendance.	Apportionment on 1/3 Basis.	Apportionment on Attendance.	Total Apportionment.
SANTA BARBARA	Lompoc	51	\$382 50	\$402 39	\$784 89
	Santa Barbara	153	382 50	1,207 17	1,589 67
	Santa Maria	71	382 50	560 19	942 69
	Santa Ynez Valley . .	14	382 50	110 46	492 96
	Total				\$3,810 21
SANTA CLARA . .	Campbell	45	382 50	355 05	737 55
	Gilroy	54	382 50	426 06	808 56
	Los Gatos	58	382 50	457 62	840 12
	Mountain View	22	382 50	173 58	556 08
	Palo Atlo	101	382 50	796 89	1,179 39
	San Jose	482	382 50	3,802 98	4,185 48
	Santa Clara	117	382 50	923 13	1,305 63
	Total				\$9,612 81
SANTA CRUZ . . .	Santa Cruz	138	382 50	1,088 82	1,471 32
	Watsonville	90	382 50	710 10	1,092 60
	Total				\$2,563 92
SHASTA	Shasta County	85	782 50	670 65	1,053 15
	Total				\$1,053 15
SISKIYOU	Etna Union	31	382 50	244 59	627 09
	Siskiyou County	51	382 50	402 39	784 89
	Total				\$1,411 98
SOLANO	Armijo Union	46	382 50	362 94	745 44
	Benicia	37	382 50	291 93	674 43
	Dixon Union	29	382 50	228 81	611 31
	Vacaville	86	382 50	678 54	1,061 04
	Vallejo	59	382 50	465 51	848 01
	Total				\$3,940 23
SONOMA	Cloverdale	11	382 50	86 79	469 29
	Healdsburg	63	382 50	497 07	879 57
	Petaluma	72	382 50	568 08	950 58
	Santa Rosa	136	382 50	1,073 04	1,455 54
	Sonoma Valley	34	382 50	268 26	650 76
	Total				\$4,405 74
STANISLAUS . . .	Modesto	62	382 50	489 18	871 68
	Oakdale	37	382 50	291 93	674 43
	Total				\$1,546 11

County.	Name of School.	Ave'ge Daily Attendance.	Apportionment on $\frac{1}{3}$ Basis.	Apportionment on Attendance.	Total Apportionment.
SUTTER	Sutter City	30	\$382 50	\$236 70	\$619 20
	Total .....	...	...	...	\$619 20
TEHAMA	Red Bluff	71	382 50	560 19	942 69
	Total .....	...	...	...	\$942 69
TULARE	Dinuba	28	382 50	220 92	603 42
	Porterville	64	382 50	504 96	887 46
	Tulare	122	382 50	962 58	1,345 08
	Visalia	130	382 50	1,025 70	1,408 20
	Total .....	...	...	...	\$4,244 16
VENTURA	Oxnard	33	382 50	260 37	642 87
	Santa Paula	82	382 50	646 98	1,029 48
	Ventura	133	382 50	1,049 37	1,431 87
	Total .....	...	...	...	\$3,104 22
YOLO	Esparto	11	382 50	86 79	469 29
	Winters Joint	17	382 50	134 13	516 63
	Woodland	75	382 50	591 75	974 25
	Total .....	...	...	...	\$1,960 17
YUBA	Marysville	103	382 50	812 67	1,195 17
	Total .....	...	...	...	\$1,195 17

Total number of High Schools entitled to receive State aid June 30, 1903.	143
Total average daily attendance in such schools	13,860
Rate per school on the one-third basis	\$ 382 50
Rate per child on average daily attendance	7 89
Amount apportioned on one-third basis	54,697 50
Amount apportioned on average daily attendance	109,355 40
Amount remaining unapportioned	40 48



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